<u>**IN THE ABSTRACT:**</u>

Please add the following new abstract:

ABSTRACT OF THE DISCLOSURE

An X-ray image diagnostic apparatus including an X-ray source, an X-ray flat panel detector, an image processor, and an image display. The image processor includes a storage for storing plural sets of residual image data, acquired in advance from X-ray images in X-ray image acquisition modes from the X-ray flat panel detector before an actual measurement, in correspondence with the X-ray image acquisition modes, and a residual image corrector for correcting residual image data contained in an X-ray image in the actual measurement from the X-ray flat panel detector, using the residual image data stored in the storage.